

**Amendments to the Specification:**

Please insert the following paragraph into the specification on page 12, after line 18 of the as filed application.

A thermodynamic cracking unit in accordance with the present disclosure, wherein the colliding particles in the riser of varying diameter leads to sonoluminescence caused by the fact that gas trapped in cavities on the particles and between these are exposed to adiabatic compression whereby temperature and pressure of the gas bubbles are increased and sonoluminescence is created by splitting of the molecules in the gas, which can be oil gas or steam, and emits light and by the fact that part of the oxygen radicals binds to the splitted oil molecules and thereby results in hydrogenation of the oil.